"PERIODICITY IN THE FEEDING HABIT OF *Tomocerus longicornis* (MULLER) (COLLEMBOLA)"

It was observed during experimental feeding, that while some individuals of *T. longicornis* (Muller) showed a positive response to solid food material consisting of fungal colonies, others did not react at all and stayed away from it. Since such varied reaction of individuals was found to be a regular feature, it was considered worthwhile to look into its causes.

Preliminary investigation has shown that the difference in feeding behaviour is not actually between individuals but in the different stages of the life of each individual. From the stand point of feeding behaviour, the following phases can be distinguished in the life of this insect.

(i) Immediately after the moult the individual remains inactive possibly until the cuticular structures of the mouthparts and the cuticular lining of the alimentary canal has become sufficiently hardened for handling and manipulating solid food.

(ii) In the second, rather long lasting phase, the insect feeds on solid food material.

(iii) In the third phase, starting some time before the next moult, the insects changeover exclusively to organic fluid food.

(iv) In the next, premoulting phase, the insect suspends feeding all together and consumes the food stored in the gut. This is followed by the moulting of the epithilial lining of the gut.

As far as the author is aware such periodicity in the feeding behaviour has not been recorded earlier and it may be important for those interested in evaluating the role of Collembola in the break down of leaf-litter in the soil profile. For a correct evaluation of economic role it seems essential to take into account not only the population of insects but also of the durations of each phase.

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